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28710	7590	05/08/2009

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CHICAGO, IL 60680

EXAMINER
SHRESTHA, BIJENDRA K

ART UNIT	PAPER NUMBER
3691	

DATE MAILED: 05/08/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,063	10/16/2003	Thomas F. Conroy	MCEA-P3-03	8910

TITLE OF INVENTION: COMPUTER SYSTEM FOR MANAGING FLUCTUATING CASH FLOWS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$755	$300	$0	$1055	08/10/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,063	10/16/2003	Thomas F. Conroy	MCEA-P3-03	8910

TITLE OF INVENTION: COMPUTER SYSTEM FOR MANAGING FLUCTUATING CASH FLOWS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$755	$300	$0	$1055	08/10/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
SHRESTHA, BIJENDRA K	3691	705-038000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent):   ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.   OMB 0651-0033   U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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SHRESTHA, BIJENDRA K

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 944 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 944 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	10/687,063	CONROY ET AL.
	Examiner	Art Unit
	BIJENDRA K. SHRESTHA	3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *09/09/2008*.

2. ☒ The allowed claim(s) is/are *1-76, 78-80 and 82-93*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

        a) ☐ All   b) ☐ Some*   c) ☒ None   of the:

            1. ☐ Certified copies of the priority documents have been received.

            2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

            3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

                International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date *03/24/2009*

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Hani M. Kazimi/
Primary Examiner, Art Unit 3691

EXAMINER STATEMENT

1.   This action is responsive to the amendment filed on 09/09/2008. Of the original

claims 1-70, claims 1-6, 8-17, 20-21, and 24-70 have been amended, and new claims

71-93 have been added by applicants' amendment. Therefore, claims 1-93 are under

consideration for prosecution of this application.

Summary of this Office Action

2.   Applicants' arguments filed on <u>09/09/2008</u>, and examiner's amendment have

been fully considered, and discussed in the next section below, are deemed to be

persuasive and the prior art rejections are withdrawn. Therefore, claims 1-76, 78-80

and 82-93 are deemed to be allowable over the prior art of record, and applicants'

request for allowance is respectfully granted.

EXAMINER'S AMENDMENT

3.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

4.   Authorization for this examiner's amendment was given in a telephone interview

with attorney Peter K. Trzyna, Esq. (registration # 32,601) on December 04, 2008 and

March 17, 2009. The application has been amended as follows:

1. (Currently amended) A computer ~~aided~~ <u>implemented method</u> ~~of using an apparatus~~ to <u>manage cash flow for a transaction</u>, the method ~~including~~ <u>comprising</u> the steps of:

controlling <u>by</u> a computer system comprising a digital computer processor to process input data into output data, the processor in communication with an input device to receive the input data and to an output device to output the output data, said processor programmed ~~so as~~ to ~~facilitate managing~~ <u>manage</u> a financial derivative transaction, specified by lives of individuals and by time periods, of actual cash flow for expected cash flow, said cash flows arising from at least one event of death, disability, ~~health,~~ and survivorship wherein said managing includes:

receiving, as some of said input data, specification of said lives and specification of said time periods, said specifications corresponding to said financial derivative transaction;

receiving, as some of said input data, respective descriptions of risks, statistical assumptions for said risks, and financial assumptions for said risks, said risks and said assumptions being associated with said lives for each of the time periods corresponding to said financial derivative transaction;

calculating, from the descriptions and the assumptions, expected cash flows corresponding to said risks for the time periods corresponding to said financial derivative transaction;

receiving, as some of said input data, actual cash flows information from occurrence of events corresponding to said risks associated with said lives in said time periods of said financial derivative transaction;

accounting for a first party to the transaction owing expected cash flows to a second party according to the financial derivative transaction;

accounting for the second party owing the actual cash flows to the first party according to the financial derivative transaction; and

computing said output data, from said accountings, said output data corresponding to a net settlement, for each of said time periods, between the parties in the financial derivative transaction, defined by the lives and by the time periods, of the actual cash flow and the expected cash flow.

2. (Previously Presented)   The method of claim 1, wherein the step of receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with contractual exposures from respective insurable risk coverage of the individuals.

3. (Previously Presented)   The method of claim 1, wherein the step of receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with respective risk exposure to the individuals.

4. (Previously Presented)   The method of claim 1, wherein the step of receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with contractual exposures from corporate-owned life insurance coverage of the individuals.

5. (Previously Presented)   The method of claim 1, wherein the step of receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with contractual exposures from bank-owned life insurance coverage of the individuals.

6. (Previously Presented)   The method of claim 1, wherein the step of receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with corporate contractual benefit payment exposures to the individuals.

7. (Original)   The method of claim 1, wherein the step of receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with contractual exposures in a reinsurance treaty.

8. (Previously Presented)   The method of claim 1, wherein the step of calculating expected cash flows includes the step of processing said descriptions and said assumptions in calculating timing and amounts of expected benefits associated with said occurrence of events for the risks; and

wherein said managing includes receiving, as some of said input data, pricing data reflecting said transaction and producing, from said pricing data, documentation of the transaction.

9. (Previously Presented)   The method of claim 8, wherein the step of inputting pricing data includes the step of:

inputting a definition of a relationship between the expected cash flows and the actual cash flows reflecting a symmetric exchange of non-proportional exposures.

10. (Previously Presented) The method of claim 8, wherein the step of inputting pricing data includes the step of:

inputting a definition of a relationship between the expected cash flows and the actual cash flows reflecting a symmetric exchange of proportional exposures.

11. (Previously Presented) The method of claim 8, wherein the step of inputting pricing data includes the step of:

inputting a definition of a relationship between the expected cash flows and the actual cash flows reflecting an asymmetric exchange of proportional and non-proportional exposures.

12. (Previously Presented) The method of any one of claims 2-7, wherein said step of managing includes the steps of:

receiving, as some of said input data, financial information on securitizing of funding for the exposures; and

processing the financial information on securitizing so as to implement securitization of the funding.

13. (Previously Presented) The method of claim 12, wherein said step of processing the financial information includes the step of calculating an impact of the transaction on the securitizing.

14. (Previously Presented) The method of claim 13, wherein said step of processing the financial information includes the step of calculating an impact of the transaction on tranches for the securitizing.

15. (Previously Presented) The method of claim 14, wherein said step of processing the financial information includes the step of determining an effect of said transaction on a securitization pool.

16. (Previously Presented)   The method of any one of claims 2-7, wherein the step of receiving respective descriptions of risks includes receiving nominal death benefit face amounts for said exposures; and

wherein the step of receiving statistical assumptions includes receiving expected mortality rates; and

wherein said step of calculating expected cash flows includes the steps of:

incorporating margins and loadings in developing expected mortality rates for the transaction; and

determining expected timing and expected amount of death benefits using said expected mortality rates, said corresponding nominal death benefit face amounts, and said characteristics of said risks associated with said exposures.

17. (Previously Presented) The method of any one of claims 2-7, wherein the step of receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with at least one member of a group consisting of a plurality of the individuals and a group of the individuals.

18. (Original) The method of claim 17, wherein the step of receiving respective characteristics of risks associated with said member of the group includes receiving at least one characteristic from a group consisting of age, sex, mortality rating, morbidity rating, compensation, position, job class, and years of service.

19. (Original) The method of claim 1, wherein the step of receiving statistical assumptions includes receiving rates of decrement.

20. (Previously Presented) The method of claim 1, wherein the step of receiving statistical assumptions includes receiving rates of decrement associated with insurable risk coverage of the individuals.

21. (Previously Presented) The method of claim 1, wherein the step of receiving statistical assumptions includes receiving rates of decrement associated with insurable risk exposures to the individuals.

22. (Original) The method of claim 1, wherein the step of receiving statistical assumptions includes receiving rates of decrement associated with a reinsurance treaty.

23. (Original) The method of any one of claims 19-22, wherein the step of receiving financial assumptions includes receiving at least one of a group consisting of a discount rate, an expense, and a fee.

24. (Previously Presented) The method of any one of claims 19-22, wherein said step of managing includes the step of updating at least one of a member of a group consisting of said descriptions, said statistical assumptions, said financial assumptions, and said actual cash flows information from the occurrence of at least one of said events; and said output data include said at least one member that is updated.

25. (Previously Presented) The method of claim 16, wherein the step of receiving actual cash flows information from occurrence of events corresponding to said risks includes receiving information on actual timing and the corresponding nominal amount of death benefits, respectively for each of said individuals.

26. (Previously Presented) The method of claim 25, wherein said step of managing includes for each of said lives and for each of said time periods of the financial derivative transaction:

tracking the expected timing and the expected amount of death benefits, respectively for each of said individuals, if any, and calculating the expected cash flows as a sum of said expected amounts of death benefits;

tracking the actual timing and the corresponding nominal amount of death benefits, if any, and calculating the actual cash flows as a sum of said corresponding nominal amounts of death benefits for the actual deaths in said time period; and

producing a tracking of the net settlements between the actual cash flows and the expected cash flows in said output data.

27. (Previously Presented) The method of claim 26, wherein said step of managing includes forming a historical record of the expected timing and the expected amount of death benefits, the actual timing and the nominal amount of death benefits, respectively for each of said individuals, and each said net settlement for each of said time periods, wherein said output data include the historical record.

28. (Previously Presented) The method of claim 16, wherein said step of managing includes the steps of:

providing the second party with documentation of said cash flows; and

illustrating a transaction fee from the second party to the first party, including illustrating said transaction fee incorporated in the net settlements, wherein said output data include said transaction fee.

29. (Previously Presented) The method of claim 16, wherein said step of managing includes the step of:

> accounting for the first party receiving a fee for early termination of the transaction, wherein said output data include said early termination fee.

30. (Previously Presented)   The method of claim 16, wherein said financial transaction is specified, in some of said input data, as a financial transaction in which the second party is an entity having ownership rights to said exposures, and said exposures are on more than one life of said individuals.

31. (Previously Presented) The method of claim 16, wherein said financial transaction is specified, in some of said input data as a financial transaction pursuant to a contract binding the parties.

32. (Previously Presented) The method of claim 31, wherein said financial transaction is specified, in some of said input data as a financial transaction having a portion renewable on a period-to-period basis.

33. (Currently amended) Apparatus comprising:

> a computer system comprising a digital computer operably connected to an input device, a memory, and an output device, the computer programmed to ~~facilitate~~ <u>manage</u> a financial derivative transaction by operations including:

>> receiving, at the input device, respective descriptions of risks,

>> statistical assumptions for said risks,

>> financial assumptions for said risks,

specification of lives of individuals, and

specification of time periods;

calculating, from the descriptions and the assumptions and both said specifications, expected cash flow corresponding to said risks for the time periods of said derivative financial transaction;

receiving, at the input device, actual cash flow information from occurrence of events corresponding to said risks; and

managing the financial derivative transaction, specified by said lives and said time periods, of actual cash flow for said expected cash flow, said cash flows arising from at least one event of death, disability, ~~health~~ and survivorship, the managing comprising:

producing a first accounting of a first party to the financial derivative transaction owing the expected cash flow to a second party to the financial derivative transaction, and

producing a second accounting of the second party to the financial derivative transaction owing the actual cash flow to the first party to the financial derivative transaction, and

outputting, at said output device, output data comprising at least one of said first accounting, said second accounting, and a net settlement computed based on the expected cash flow and the actual cash flow, for each of said time periods, between the parties, in the financial derivative transaction, said output data according to the

financial derivative transaction specified by said lives and said time periods, of actual cash flow for said expected cash flow.

34. (Previously Presented) The apparatus of claim 33, wherein the receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with contractual exposures from respective insurable risk coverage of the individuals.

35. (Previously Presented) The apparatus of claim 33, wherein the receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with respective risk exposure to the individuals.

36. (Previously Presented) The apparatus of claim 33, wherein the receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with contractual exposures from corporate-owned life insurance coverage of the individuals.

37. (Previously Presented) The apparatus of claim 33, wherein the receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with contractual exposures from bank-owned life insurance coverage of the individuals.

38. (Previously Presented) The apparatus of claim 33, wherein the receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with corporate contractual benefit payment exposures to the individuals.

39. (Previously presented) The apparatus of claim 33, wherein the receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with contractual exposures in a reinsurance treaty.

40. (Previously Presented) The apparatus of claim 33, wherein the calculating expected cash flows includes processing said descriptions and said assumptions in calculating timing and amounts of benefits associated with said occurrence of events for the risks; further comprising the operation of receiving, at the input device, pricing data reflecting said financial derivative transaction.

41. (Previously Presented) The apparatus of claim 40, wherein the receiving pricing data includes the operation of:

receiving a definition of a relationship between the expected cash flows and the actual cash flows reflecting a symmetric exchange of non-proportional exposures.

42. (Previously Presented) The apparatus of claim 40, wherein the receiving pricing data includes the operation of:

receiving a definition of a relationship between the expected cash flows and the actual cash flows reflecting a symmetric exchange of proportional exposures.

43. (Previously Presented) The apparatus of claim 40, wherein the receiving pricing data includes the operation of:

receiving a definition of a relationship between the expected cash flows and the actual cash flows reflecting an asymmetric exchange of proportional and non-proportional exposures.

44. (Previously Presented) The apparatus any one of claims 34-39, further including the operation of producing, as output at the output device, data reflecting securitizing of funding for the exposures.

45. (Previously Presented) The apparatus of claim 44, wherein the operation of producing data reflecting securitizing of funding for the exposures comprises the operation of calculating impact of the financial derivative transaction on the securitizing.

46. (Previously Presented) The apparatus of claim 45, wherein the operation of producing data reflecting securitizing of funding for the exposures comprises the operation of calculating the impact of the financial derivative transaction on tranches for the securitizing.

47. (Previously Presented) The apparatus of claim 46, wherein the operation of producing data reflecting securitizing of funding for the exposures includes the operation of determining an effect of said financial derivative transaction on a securitization pool.

48. (Previously Presented) The apparatus of any one of claims 34-39, wherein the receiving respective descriptions of risks includes receiving nominal death benefit face amounts for said exposures; and

wherein the receiving statistical assumptions includes receiving expected mortality rates;

wherein the operation of calculating expected cash flows includes the operations of: incorporating margins and loadings in developing expected mortality rates for the financial derivative transaction; and

determining expected timing and expected amount of death benefits using said expected mortality rates, corresponding nominal death benefit face amounts, and said characteristics of said risks associated with said exposures.

49. (Previously Presented) The apparatus of any one of claims 34-39, wherein the receiving respective descriptions of risks includes receiving respective characteristics of said risks associated with at least one member of a group consisting of a plurality of the individuals and a group of the individuals.

50. (Previously presented) The apparatus of claim 48, wherein the receiving respective characteristics of risks associated with said member of the group includes receiving at least one characteristic of age, sex, mortality rating, morbidity rating, compensation, position, job class, and years of service.

51. (Previously presented) The apparatus of claim 33, wherein the receiving statistical assumptions includes receiving rates of decrement.

52. (Previously Presented) The apparatus of claim 33, wherein the receiving statistical assumptions includes receiving rates of decrement associated with insurable risk coverage of the individuals.

53. (Previously Presented) The apparatus of claim 33, wherein the receiving statistical assumptions includes receiving rates of decrement associated with insurable risk exposures to the individuals.

54. (Previously presented) The apparatus of claim 33, wherein the receiving statistical assumptions includes receiving rates of decrement associated with a reinsurance treaty.

55. (Previously presented) The apparatus of any one of claims 51-54, wherein the receiving financial assumptions includes receiving at least one of a discount rate, an expense, and a fee.

56. (Previously Presented) The apparatus of any one of claims 51-54, further including the operations of:

         updating at least one of said descriptions, said statistical assumptions, said financial assumptions, and said actual cash flows information from the occurrence of at least one of said events so as to produce an update; and

         including the update in output data.

57. (Previously Presented) The apparatus of claim 48, wherein the receiving actual cash flows information from occurrence of events corresponding to said risks includes receiving information on actual timing and the corresponding nominal amount of death benefits, respectively for each of said individuals.

58. (Previously Presented) The apparatus of claim 57, further including the operations of:

         tracking, for each of said time periods, the expected timing and the expected amount of death benefits, respectively for each of said individuals, if any, and calculating expected cash flows as a sum of said expected amounts of death benefits;

         tracking, for each of said time periods, the actual timing and the corresponding nominal amount of death benefits, if any, and calculating actual cash flows as a sum of said corresponding nominal amounts of death benefits for the actual deaths in said time period; and

producing a tracking of net settlements for the time periods of the financial

derivative transaction in output data.

59. (Previously Presented) The apparatus of claim 57, wherein the computing a net

settlement includes forming a historical record of the expected timing and the expected

amount of death benefits, the actual timing and the nominal amount of death benefits,

respectively for each of said individuals, and each said net settlement for each of said

time periods.

60. (Previously Presented) The apparatus of claim 48, further including the operations

of:

providing, to a computer of the second party, documentation of said cash

flows; and

illustrating a transaction fee from the second party to the first party,

including illustrating said transaction fee incorporated in the net settlement.

61. (Previously Presented)   The apparatus of claim 48, further including the

operation of accounting for the first party receiving a fee for early termination of the

financial derivative transaction in output data.

62. (Previously Presented) The apparatus of claim 48, further including the operation of

receiving data identifying the second party as an entity having ownership rights to the

exposures and wherein said exposures are on more than one of life of said individuals.

63. (Previously Presented) The apparatus of claim 48, further including the operation of

receiving data identifying the financial derivative transaction as pursuant to a contract

binding the parties, and processing responsive to said data identifying the financial

derivative transaction.

64. (Previously Presented) The apparatus of claim 63, further including the operation of

receiving data identifying the financial derivative transaction as having a portion

renewable on a period-to-period basis.

65. (Previously Presented) Apparatus comprising:

a computer system comprising a digital computer operably connected to

an input device, a memory, and an output device, the computer programmed to process

input data into output data so as to manage a financial derivative transaction, specified

by lives of individuals and by time periods, of actual mortality cash flow for expected

mortality cash flow, by operations comprising:

receiving, at the input device, respective descriptions of risks associated

with exposures from respective insurable coverage of individuals,

receiving statistical assumptions for said risks,

receiving financial assumptions for said risks, and

specification of lives of individuals, and specification of time periods,

wherein said risks and said assumptions are associated with said financial derivative

transaction;

calculating, from the descriptions and the assumptions and the

specifications of the lives of individuals and the time periods, the expected mortality

cash flows corresponding to said risks for said time periods;

receiving the actual mortality cash flows information from occurrence of events corresponding to said risks;

producing a first accounting of a first party to the transaction owing the expected mortality cash flows to a second party to the transaction, and

producing a second accounting of the second party to the transaction owing actual mortality cash flows to the first party; and

outputting, at the output device, output data comprising at least one of said first accounting, said second accounting, and a net settlement amount computed based on the expected mortality cash flow and the actual mortality cash flow, for each of said time periods, between the parties, according to the financial derivative transaction.

66. (Previously Presented) The apparatus of claim 65, wherein the calculating expected mortality cash flows includes processing said descriptions and said assumptions in calculating timing and amounts of benefits associated with said occurrence of events for the risks; further comprising the operation of receiving pricing data reflecting a symmetric exchange of non-proportional exposures; and wherein the net settlement is computed responsive to said pricing data.

67. (Previously Presented) The apparatus of claim 65, wherein the calculating expected mortality cash flows includes processing said descriptions and said assumptions in calculating timing and amounts of benefits associated with said occurrence of events for the risks; further comprising the operation of receiving pricing data reflecting a symmetric exchange of proportional exposures; and wherein the net settlement is computed responsive to said pricing data.

68. (Previously Presented) The apparatus of claim 65, wherein the calculating expected mortality cash flows includes processing said descriptions and said assumptions in calculating timing and amounts of benefits associated with said occurrence of events for the risks; further comprising the operation of receiving pricing data reflecting an asymmetric exchange of proportional and non-proportional exposures; and wherein the net settlement is computed responsive to said pricing data.

69. (Previously Presented) The apparatus of any one of claims 33-43, 51-54, 64-68, wherein the computer system includes a second digital computer, said computers cooperating to carry out the financial derivative transaction.

70. (Currently Amended)   A computer-readable memory medium comprising instructions being executed by a computer, the instructions including a computer-implemented method to manage cash flow for a transaction, the instructions for implementing comprising:

controlling <u>by</u> the computer, in a system comprising an input device and an output device, ~~so as to facilitate~~ managing a financial derivative transaction, specified by lives of individuals and by at least one time period, of actual cash flow for expected cash flow, said cash flows arising from at least one event of death, disability, ~~health,~~ and survivorship, said managing including:

receiving, at the input device, respective descriptions of risks,

receiving statistical assumptions for said risks,

receiving financial assumptions for said risks,

specification of said lives and specification of each said time period, said specifications corresponding to said financial derivative transaction;

calculating, from the descriptions and the assumptions, expected cash flow corresponding to said risks for time periods corresponding to said financial derivative transaction;

receiving actual cash flow information from occurrence of events corresponding to said risks; and

accounting for a first party to the transaction owing the expected cash flow to a second party to the transaction, and

accounting for the second party owing actual cash flow to the first party so as to produce, from said accountings, output at the output device corresponding to a net settlement, for each said time period, between the parties in the financial derivative transaction, specified by lives of individuals and by time periods, of the actual cash flow for the expected cash flow.

71. (Currently amended)   The method of any one of claims 2-7, wherein the step of receiving respective descriptions of risks includes receiving nominal benefit amounts, for any one of death, disability, ~~health~~ and survivorship benefits, for said exposures; and

wherein the step of receiving statistical assumptions includes receiving expected benefit claim rates; and

wherein said step of calculating expected cash flows includes the steps of:

incorporating margins and loadings in developing expected benefit claim rates for the financial derivative transaction; and

determining expected timing and expected amounts of benefits using said expected benefit claim rates, said corresponding nominal benefit amounts, and said characteristics of said risks associated with said exposures.

72. (New)   The method of claim 71, wherein the step of receiving actual cash flows information from occurrence of events corresponding to said risks includes receiving information on actual timing and the corresponding nominal amount of said benefits, respectively for each of said individuals.

73. (New)   The method of claim 72, wherein said step of managing includes, for each of said lives and for each of said time periods of the financial derivative transaction:

tracking the expected timing and the expected amount of benefits, respectively for each of said individuals, if any, and calculating expected cash flows as a sum of said expected amounts of benefits;

tracking the actual timing and the corresponding nominal amount of benefits, if any, and calculating actual cash flows as a sum of said corresponding nominal amounts of benefits for the actual claims in said time periods; and

producing a tracking of the net settlements between the actual cash flows and the expected cash flows in said output data.

74. (New)   The method of claim 1, wherein the financial derivative transaction comprises a financial derivative embedded into a financial instrument; and wherein the output data include documentation of the financial instrument.

75. (New)   The method of claim 1, wherein the financial derivative transaction comprises a financial derivative embedded into a financial instrument, and further

comprising the step of valuing said financial instrument based on the financial derivative

transaction; and, wherein said output data includes the value of said financial

instrument.

76. (New)   The method of any one of claims 1-11, 19-22, 74-75, wherein said cash

flows are disability cash flows.

77. (Cancelled)

78. (New)   The method of any one of claims 1-11, 19-22, 74-75, wherein said cash

flows are survivorship cash flows.

79. (New)   The method of any one of claims 1-11, 19-22, 74-75, wherein said cash

flows are death cash flows.

80. (New)   The apparatus of any one of claims 33-43, 51-54, and 70, wherein said

cash flows are disability cash flows.

81. (Cancelled)

82. (New)   The apparatus of any one of claims 33-43, 51-54, and 70, wherein said

cash flows are survivorship cash flows.

83. (New)   The method of claim 1, further including the step of storing each said net

settlement in memory accessible to said processor.

84. (New)   The method of claim 1, wherein the step of facilitating the net settlement

comprises facilitating a payment.

85. (New)   The apparatus of any one of claims 33, 65, and 70, further including the

operation of storing each said net settlement in memory accessible to said processor.

86. (New) *The apparatus of any one of claims 33, 65, and 70, wherein the net settlement corresponds to a payment.*

87. (New) *The method of claim 73, wherein said step of managing includes forming a historical record of the expected timing and the expected amount of benefits, the actual timing and the nominal amount of benefits, respectively for each of said individuals, and each said net settlement for each of said time periods, wherein said output data include the historical record.*

88. (New) *The method of claim 71, wherein said step of managing includes the steps of:*

providing the second party with documentation of said cash flows; and

illustrating a transaction fee from the second party to the first party, including illustrating said transaction fee incorporated in the net settlements, wherein said output data include said transaction fee.

89. (New) *The method of claim 71, wherein said step of managing includes the step of:*

accounting for the first party receiving a fee for early termination of the financial derivative transaction, wherein said output data includes said early termination fee.

90. (New) *The apparatus of any one of claims 33, 65, 70, wherein said financial derivative transaction is specified, in input data, as a financial transaction in which the second party is an entity having ownership rights to said exposures, and said exposures are on more than one life of said individuals.*

91. (New)   The apparatus of any one of claims 33, 65, 70, wherein said financial

derivative transaction is specified in input data as a financial transaction pursuant to a

contract binding the parties.

92. (New)   The apparatus of any one of claims 33, 65, 70, wherein said financial

derivative is specified in input data as a financial transaction having a portion renewable

on a period-to-period basis.

93. (New)   The apparatus of any one of claims, 33, 65, further including the operation

of determining an early termination fee corresponding to the financial derivative

transaction.

Conclusion

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Bijendra K. Shrestha whose telephone number is (571)

270-1374. The examiner can normally be reached on 8:00 AM-4:30 PM (Monday-

Friday).

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BKS/3691

/Hani M. Kazimi/
Primary Examiner, Art Unit 3691